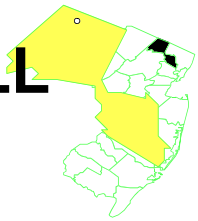
RINGWOOD MINES/LANDFILL

NEW JERSEY

EPA ID# NJD980529739



EPA REGION 2
CONGRESSIONAL DIST. 05
Passaic County
Ringwood Borough

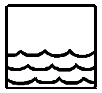
Site Description

Magnetite mines were operated on the 500-acre Ringwood Mines/Landfill Site (Site) as early as the 1700s, and wastes have been disposed of at the Site since the 1960s. The Site is about ½ mile wide and 1 ½ miles long and consists of rugged forested areas, open areas overgrown with vegetation, abandoned mine shafts and surface pits, an inactive landfill, an industrial refuse disposal area, small surficial dumps, a municipal recycling center, the Ringwood Borough garage, and about 50 private homes. Two abandoned mines, Peter's Mine and Cannon Mine, have been filled with garbage over the years. Peter's Mine also contains paint sludges, solvents, and scrap metal. Several drums have been observed in Cannon Mine. Mining ended at the Site in the early 1900s, and the history of the Site is unclear from then until the late 1930s. The Site was purchased by the U.S. Government prior to 1940 and later was sold to a succession of owners. From 1967 until 1974, Ringwood Realty, one of the former owners, deposited waste products for Ford Motor Company including car parts, solvents, and paint sludges, on the ground surface and in abandoned mine shafts. In 1970, Ringwood Realty donated 290 acres in the southern portion of the Site to the Ringwood Solid Waste Management Authority, which began operating a permitted municipal disposal area in 1972. The landfill was closed by the State in 1976. Ground water beneath the Site discharges to surface streams and the Wanaque Reservoir, located ½ mile southeast of the on-site sludge disposal area. The area around the Site is primarily residential, with about 50 residences located on or near disposal areas. Approximately 20 water supply wells draw water from the bedrock aquifer, which supplies a few residences and industries in the area. Approximately 13,000 people live in Ringwood Borough. The Wanaque Reservoir provides drinking water to about 650,000 people.

Site Responsibility: This Site is being addressed through Federal and potentially responsible parties' actions.

NPL LISTING HISTORY
Proposed Date: 12/01/82
Final Date: 09/01/83
Deleted Date: 11/2/94

Threats and Contaminants

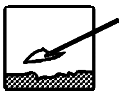


Sampling showed that stream sediments were contaminated with metals including lead, while streams on and near the Site were contaminated with the volatile organic compound (VOC) methylene chloride. VOCs and metals have been found in the overburden/upper bedrock aquifer ground water. An assessment of human health and environmental risk undertaken by EPA indicated that the primary health concern associated with this Site was the risk to people who accidentally ingest contaminated soils. The removal of contaminated soil eliminated the health threat from direct contact with soil.

Cleanup Approach

The Site was addressed in two stages: immediate actions and a long-term remedial phase focusing on monitoring the entire Site.

Response Action Status



Immediate Actions: From 1987 to 1988, a potentially responsible party, Ford International Services, Inc., removed 7,000 cubic yards of surficial paint sludge containing lead and arsenic from four on-site areas and disposed of it off site. In early 1990, 60 drums containing wastes were discovered. The drums were removed and disposed of off-site. Additional solidified surficial paint sludge (approximately five cubic yards) discovered in April of 1995 was also disposed of off-site by Ford International Services, Inc. In 1997, additional surficial paint sludge was discovered at the Site and Ford International Services, Inc.'s contractor removed this surficial paint sludge during December 1997 and January 1998. Removal of this surficial paint sludge was consistent with prior removal actions that took place during the above mentioned years. Approximately fifty (50) cubic yards of paint sludge was excavated. The excavated paint sludge was containerized and transported for disposal at an appropriate off-site facility.

Entire Site: Cleanup technologies selected to address ground water, surface water, soil, and sediment contamination include: sampling of soil, with excavation and off-site disposal of soil confirmed to be contaminated; backfilling and revegetation of soil; and ground water, surface water, and wetlands monitoring. Long-term ground water and surface water monitoring efforts began in 1989 and were completed in 2001. As expected, natural attenuation has reduced contaminant levels since the source of contamination has been removed.

Site Facts: The EPA issued an Administrative Order to Ford International Services, Inc. to clean up soil contamination and to eliminate health and environmental risks associated with the Site. Ford has completed this clean-up under the terms of this order. EPA deleted the Site from the NPL on November 2, 1994.

EPA performed a five-year review of the Site in 1998 to ensure that the remedial action remains protective of public health and the environment. Based upon a review of the ROD, the semiannual long-term monitoring reports, and an inspection of the Site, EPA concluded that the remedy selected in the ROD is fully protective of human health and the environment. A final review of the Site is planned for 2003.

Cleanup Progress  *(Threat Mitigated by Physical Cleanup Work)*

By removing over 7,000 cubic yards of contaminated soil and 60 drums containing hazardous wastes and disposing of this material off site, the potential for exposure to hazardous materials from the Ringwood Mines/Landfill Site has been addressed. The five-year Environmental Monitoring Program to sample groundwater at the Site concluded in 1995 and EPA reviewed the data produced. The data showed that elevated levels of lead and arsenic existed in four (4) on-site monitoring wells. Ford International Services, Inc. resampled those wells using the Low-Flow Sampling and Purging Technique in August 1999 and the data from this event showed an elevated arsenic level in one of the wells. In order to monitor this situation, Ford International Services, Inc. resampled all four wells again and sampled three (3) surface water locations in April 2000. Results of this last round of sampling showed that lead and arsenic levels have decreased and were below health-based levels. In addition, no contaminants were found in the surface water above health-based levels. Long-term monitoring at this Site has been concluded.

Site Repository 

Ringwood Library, 145 Skylands Road, Ringwood, New Jersey 07456